

## UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,558	03/08/1999	Owen Jones	373US-C	8844
:	7590 10/03/2002			
Ms Carla Eatwell			EXAMINER	
NCT Group In 6 Southgate Co	ourt		MEI, XU	
Annapolis, MD 21401			ART UNIT	PAPER NUMBER
			2644	
			DATE MAILED: 10/03/2002	3

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No. **09/595,558** 

Applicant(s)

Jones

Examiner

Xu Mei

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The MAILING DATE of this communication appears on the cover sheet with the correspondence address					
Period for Reply	·				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.					
<ul> <li>Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no mailing date of this communication.</li> </ul>	event, however, may a reply be timely filed after SIX (6) MONTHS from the				
If the period for reply specified above is less than thirty (30) days, a reply within the st If NO period for reply is specified above, the maximum statutory period will apply and Failure to reply within the set or extended period for reply will, by statute, cause the appropriate to reply received by the Office later than three months after the mailing date of this cearned patent term adjustment. See 37 CFR 1.704(b).	will expire SIX (6) MONTHS from the mailing date of this communication. optication to become ABANDONED (35 U.S.C. § 133).				
Status					
1) X Responsive to communication(s) filed on <u>Mar 8, 199</u>	9				
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This actio	n is non-final.				
3) Since this application is in condition for allowance exclosed in accordance with the practice under Ex part					
Disposition of Claims					
4) 🗓 Claim(s) _22, 27, and 28	is/are pending in the applica				
4a) Of the above, claim(s)	is/are withdrawn from considera				
5)	is/are allowed.				
6) X Claim(s) 22, 27, and 28	is/are rejected.				
7)	is/are objected to.				
8)	are subject to restriction and/or election requirem				
Application Papers	-				
9) The specification is objected to by the Examiner.					
10) The drawing(s) filed on is/are	e a accepted or b) objected to by the Examiner.				
Applicant may not request that any objection to the drawing					
	is: a☐ approved b)☐disapproved by the Examiner.				
If approved, corrected drawings are required in reply to this					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgement is made of a claim for foreign priori	y under 35 U.S.C. § 119(a)-(d) or (f).				
a) ☐ All b) ☐ Some* c) ☐None of:					
1. $\square$ Certified copies of the priority documents have be	een received.				
2.  Certified copies of the priority documents have be	een received in Application No				
3.  Copies of the certified copies of the priority documents application from the International Bureau (	PCT Rule 17.2(a)).				
*See the attached detailed Office action for a list of the ce	•				
14) Acknowledgement is made of a claim for domestic price	, ,				
a) The translation of the foreign language provisional a	• •				
15) Acknowledgement is made of a claim for domestic price	rity under 35 U.S.C. §§ 120 and/or 121.				
Attachment(s)	· 🗖 · · · · · · · · · · · · · · · · · ·				
	4) Interview Summary (PTO-413) Paper No(s)				
	5) Notice of Informal Patent Application (PTO-152)  6) Other:				
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## DETAILED ACTION

- 1. This communication is responsive to the applicant's amendment dated 3/8/1999.
- 2. The information disclosure statement filed 3/8/1999 fails to comply with 37 CFR 1.98(a)(1), which requires a list of all patents, publications, or other information submitted for consideration by the Office. It has been placed in the application file, but the information referred to therein has not been considered.
- 3. Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 recites the limitation "the transfer function of the system" in line 13. There is insufficient antecedent basis for this limitation in the claim.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country,

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more than one year prior to the date of application for patent in the United States.

5. Claims 22, 27 and 28 are rejected under 35 U.S.C. § 102(b) as being anticipated by Allie et al. (US-5,172,416, hereinafter, Allie) or Lo et al (US-5,425,105) or Saruta et al (US-5,535,283).

Considering claims 22, 27 and 28, Allie (Fig. 1) or Lo (Figs. 3-4) or Saruta (Figs. 1, 4) discloses an active noise canceling (ANC) system which comprises a sound generator (antinoise speaker), a first sensor (error microphone for generating a residual signal of anti-noise and ambient noise), a second sensor (input microphone or input noise sensor for sensing ambient noise), a noise cancellation processor (adapter filter, or model that as shown), the first sensor cooperating with processor and the sound generator to form a feedback loop (signal from output error microphone feedback to cancellation processor), filter means (adapter filters) contained within the processor that filter the feedback signal for selectively varying the transfer function of the system, wherein in the feedback signal is processed by the processor to form a component of the anti-noise field. Allie or Lo or Saruta also teaches a second sound sensor (input microphone or input noise sensor) for providing a feedforward path to the signal processor means. The amplitude of the ambient noise from both sensors are inherently controlling

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the gain of the ANC system which proportional to the amplitude of the sensed noise signals. And the different frequency ranges as claimed in claims 27 and 28 are also met by Allie or Lo or Saruta since the input noise signal and the residue noise signal are different and inherently with different frequency ranges. The transfer function of the feedback loop of Allie, Lo or Saruta does not changed and the feedback signal is processed by the ANC processor to generating a anti-noise signal/field.

6. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xu Mei whose telephone number is 703-308-6610. The examiner can normally be reached on Monday-Friday (9:30-6:00), alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W Isen can be reached on 703-305-4386.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703-306-0377.

Primary Examiner
Art Unit 2644
9/23/2002